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EXAMINER

ZURITA, JAMES H

ART UNIT	PAPER NUMBER
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3625

DATE MAILED: 04/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/241,188

Applicant(s)

BLANDINA ET AL.

Examiner

James H Zurita

Art Unit

3625

146

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-23, 25-27 and 29-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-23, 25-27, 29-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Prosecution History

Application was filed on 1 February 1999 (paper #1).

A First Office Action rejected Claims 1-19 on 29 September 2001 (paper # 19).

Amendment A Cancelled claims 1-19 on 2 January 2002 (paper # 20).

A Final Rejection rejected claims 20-35 on 7 March 2002 (paper # 21).

Applicant filed a response on 20 May 2002 (paper # 22) and Amendment B on 7 May 2002 (paper #23).

The Examiner Withdrew finality of previous rejection and rejected claims 20-25 on 30 May 2002 (paper #24).

By Amendment C, applicant amended claims 20, 28, 29 and cancelled claim 24, on 30 August 2002 (paper #25).

The Examiner issued a Final Rejection of claims 20-23, 25-35 on 19 November 2002 (paper #26).

Applicant filed an After Final Amendment D on 2 April 2003 (paper #27) and requested reconsideration. Amendment D was not entered.

The Office mailed an Advisory Action 18 April 2003 (paper # 28).

Applicant filed a Notice of Appeal 28 April 2003 (paper # 29).

Applicant filed a Request for Continuing Examination 28 May 2003 (paper # 30).

The Examiner rejected claims 20-23 and 25-35 on 13 August 2003 (paper # 31).

Applicant sent Amendment E on 13 November 2003 (paper # 32).

The Office mailed a Notice of Non-compliance on 13 November 2003 (paper # 33). The Notice informed Applicant that Amendment E is inconsistent with 27 C.F.R. 1.121 in that it did not provide a complete listing of all the claims, including claim 24.

Applicant faxed a Substitute Response on 15 December 2003. This paper was not entered because it failed to provide a full listing of the claims, including claim 24, as required. The Substitute Response introduced new errors. Paragraph 1 on page 1, "In response to the Final Office Action mailed November 18, 2003..." should read

- "In response to the Office Action mailed August 13, 2003..." since the Office Action of that date (paper #31) was a non-final rejection, or
- "In response to the Notice of Non-Compliant Amendment mailed November 18, 2003..."

The Examiner attempted several times to reach applicant's attorney by telephone to inform him of the errors in his Substitute Response. The efforts were unsuccessful.

The present Office Action is a response to Substitute Response of 15 December 2003, which cancelled claim 28. Claim 24 was cancelled in Amendment B of 30 August 2002 and therefore does not affect an Office Action on the merits. Applicant must submit a complete listing of all the claims, as per 27 C.F.R. 1.121.

Claim Rejections - 35 USC § 112

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. See also Response to Arguments -- 35 USC § 112 Rejection, below.

Claims 20, 29 and claims dependent thereon are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly

claim the subject matter which applicant regards as the invention. The claims refer to "key object classes" "secondary object classes" and that the "key object classes" partition the database in accordance with high-level category. The term is indefinite because the specification does not clearly redefine the term, and applicants appear to use the term as synonyms.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). While applicant may be his or her own lexicographer, a term in a claim may not be given a meaning repugnant to the usual meaning of that term. See *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947).

The term "key" and "key object class" in claims 20 and 29 are used by the claim to mean "a class of objects that contain keys", while the accepted meaning is "A key (key field) is an identifier for a record or group of records in a data file. In database design, an index is a list of keys (or keywords), each of which identifies a unique record. Indices make it faster to find specific records and to sort records by the index field, that is, the field used to identify each record."¹ A partition is a logically distinct portion of

¹ Definition of Index, RANDOM HOUSE WEBSTER's Computer and Internet Dictionary.

memory or a storage device that functions as though it were a physically separate unit; In database programming, a partition is a subset of a database table or file.²

The terms "key", "key object class" "secondary object class" will be given their broadest reasonable interpretation to read on a field that serves as a reference to data, such as a customer identification number, that is used to reference customer data such as a customer's address, telephone number, etc. A secondary object class will be interpreted to read on data related to an additional classification of data in a database.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 20-23, 25-27 and 29-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Schein** et al. U.S. Patent 6,226,623 in view of **Owens** et al. (US Patent 6,047,267).

As noted above, "key", "key object class" "secondary object class" will be given their broadest reasonable interpretation to read on a field that serves as a reference to data, such as a customer identification number, that is used to reference customer data such as a customer's address, telephone number, etc. A secondary object class will be interpreted to read on data related to an additional classification of data in a database. Prior art will be interpreted to read on applicants' claims where prior art discloses one or more fields that organize data into categories. Prior art will be interpreted to read on the

² Definition of Partition, MICROSOFT Computer Dictionary.

claims where prior art discloses the use of database fields to identify customers and customer relationships to providers of financial services.

Schein discloses a system and methods for creating and facilitating a plurality of stored value products, the system comprising:

- (a) a plurality of client systems each of said client systems being associated with at least one of the plurality of stored value products (*Schein* discloses that banks offer additional products or services and that customers may open accounts (i.e., *Schein* creates and facilitates plurality of financial products, including stored value products) see at least 4, lines 23-44). *Schein* describes a plurality of stored value products associated with a CITIBANK client system; *Schein* discloses that brokerage firms such as MERRILL LYNCH also participate in offering financial products such as CITIBANK's; *Schein* discloses that VISA CORPORATION may also use their invention (see at least Col. 6, lines 6-67, Col. 21, lines 37-63) and that various other financial institutions and networks and participants of those networks may use their invention (Col. 22, lines 4-16).
- (b) database facilitating the storage and retrieval of customer data, merchant data, and a plurality of data items (see at least, Col. 9, lines 42-47; see also references to centralized databases, Col. 10, lines 41-Col. 11, line 20);
- (c) a transaction capture module configured to receive transaction data from a point-of-sale terminal configured to [receive] accept at least one of said plurality of stored value products (see at least, Col. 10, lines 41-56; Col. 20, lines 51-67; Col. 20, lines 51-67); and

- (d) a *database server* configured to support [each of] said stored value products, to receive said transaction data from said transaction capture module, and to route said transaction data among said plurality of stored value products executing on said plurality of client systems; (see at least, Col. 9, line 62-Col. 10, line 7; see also at least references to multiple-user databases sharing of information and resources, Col. 7, lines 12-34; see references to location of various databases, including centralized data storage, and communication with various client systems that store and supply data to a centralized site, Col. 10, lines 41-56);
- (e) wherein each of said stored value products comprises a plurality of data items retrieved from said database (see at least, Col. 7, lines 13-33, describing service providers, financial institutions, their products, including stored-value products),
- (f) wherein each of said plurality of data items provides a function that is available to each of the plurality of stored value products [such that]; and wherein each of said plurality of stored value products is allowed to retrieve said customer data and said merchant data from said database using at least a portion of said plurality of objects (see at least, Col. 10, lines 41-56; see also at least references to profiles stored in a single repository, Col. 10, lines 28-Col. 11, line 48).

Schein discloses a report generating system in communication with a database server, wherein the report generating system is configured to assemble reports based at least in part upon said transaction data (see Col. 6, lines 53-65). *Schein* discloses an authorization server in communication with the database server and the point-of-sale terminal and wherein the point-of-sale terminal is configured to query the authorization

server for transaction approvals (see at least, Col. 2, lines 7-17; Col. 22, lines 4-24; Fig. 13, Fig. 2, items 28, 46; Col. 3, lines 53-63. *Schein* discloses a plurality of data items comprising consumer information that is available to each of a plurality of stored value products (see at least, Col. 10, lines 41-56).

Schein discloses a server facilitating the operation of a plurality of stored value programs, each of said stored-value programs being associated with one of a plurality of client systems, the server comprising:

- (a) a digital computer in communication with a database maintaining consumer information, merchant information and a plurality of data items (see at least, Col. 9, line 42-Col. 10, line 7);
- (b) wherein each of said plurality of data items is configured to facilitate a particular function and to associate with each of said plurality of stored value programs (see at least, Col. 7, lines 13-33, describing service providers, financial institutions and their products), and
- (c) wherein each of said plurality of stored value programs accesses said consumer information and said merchant information via at least one of said plurality of data items (see at least, Col. 10, lines 41-56);
- (d) such that said consumer information and said merchant information is available to each of said plurality of financial products through a common interface available from the plurality of client systems. (see description of a common interface called a Global Integration Facility/GIF Col. 14, lines 36-51; see also references to client systems sending information to a centralized system, Col. 10, lines 28-65).

Schein discloses a method of facilitating financial transactions at a server, the method comprising the steps of:

- (a) selecting a first plurality of objects from a repository of objects to form a first stored value program, said first stored value program corresponding to a first financial product and being associated with a first client system (see at least Col. 3, line 65-Col. 6, line 65 for description of the art related to forming a first stored value program and its corresponding financial product; Col. 4, lines 39-5Col. 11, lines 11-48; Col. 12, lines 21-49 describing linking of various customer accounts and financial products; see also claim 20, above);
- (b) selecting a second plurality of objects from said repository of objects to form a second stored value program, said second stored value program corresponding to a second financial product and being associated with a second client system (see at least Col. 3, line 65-Col. 6, line 65 for description of the art related to forming a first stored value program and its corresponding financial product; Col. 4, lines 39-5Col. 11, lines 11-48; Col. 12, lines 21-49 describing linking of various customer accounts and financial products); and
- (c) accessing a *database* comprising consumer information and merchant information by said first and second client systems such that said first and second stored value programs interact with said *database* via said first and second pluralities of objects, respectively, to implement said first and second financial products on said first and second client systems, respectively (see at least Col. 7, lines 13-33; Col. 10, lines 41-56; see also utilization of common

reports and customer demographic information available from stored objects that are created by any client system, Col. 10, lines 66-Col. 11, line 34).

Schein discloses receiving a transaction request from a point of sale terminal, said transaction request corresponding to one of said financial products (see at least Col. 10, lines 41-56, Col. 15, lines 41-52; Col. 20, line 51-Col. 22, line 3).

Schein discloses determining a financial product corresponding to a transaction request at a transaction server, and further comprising a step of processing a transaction request in accordance with a first (or *nth*) plurality of data items if a transaction request corresponds to a first financial product (or *nth*). See at least, Col. 10, lines 41-Col. 12, line 49, describing the types of information available from the database. The information on the database is available for each transaction, and the transaction request is linked to a customer's products. A customer may have many products, each product associated with an object. These data items may also be referred to as a first through *nth* product.

Schein discloses separating a first and second financial product based upon a key value where said key value corresponds to a business unit. (see at least, Col. 5, lines 5 -Col. 67; Col. 6, line 7-Col. 7, line 46; Col. 10, lines 41- Col. 11, line 10 describes Database Management Systems. Database systems rely on unique and non-unique keys to store and access information. A key may identify CITIBANK, see at least, or a key may identify the CMMA CITIBANK MONEY MANAGEMENT ACCOUNT, as a separate business unit, if desired).

In summary, *Schein* discusses all limitations of applicants' invention, including stored value products such as smartcards and ATM cards. Client system computers may be connected to servers via the Internet (see at least Fig. 3, and Col. 15, line 53-Col. 16, line 7, Col. 21, lines 4-36; Col. 9, lines 57-Col. 10, line 7). *Schein* mentions several types of persistent repository mechanisms, including DB2, ORACLE (Col. 9, lines 1-67; see also application, page 17, lines 16-3). *Schein* discloses that other data models and structures may be applied (see at least Col. 6, lines 7-45, profiles and data models) and points out problems that arise when several sections in one or more clients maintain application-specific data and programs (see at least Col. 6, lines 25-44). Classes and objects are another way of modeling & data in persistent storage.

Schein does not use the words class and objects to specifically disclose:

...[first plurality of] objects...a first stored value program...
...objects being instances of a secondary object class derived from a key object
class...
...key object classes...secondary classes...derived from said key object
classes...
...[second plurality of] objects...
...second stored value program(s)...
...[database]...such that said first and second stored value programs...interact
with...[database]... via ... first and second pluralities of objects

As admitted by applicant, these words are found when one uses a data model called the "object-oriented" model. **Owens** discloses the use of relational databases in an object-oriented design in a multi-product on-line and Internet environment (see at least Abstract, Col. 1, lines 1-Col. 2, line 60, Col. 5, lines 36-Col. 7, line 30). **Owens** discloses a system for administering a plurality of financial resources in an object-oriented paradigm where persistent storage takes place in relational database management scheme (see at least references to SQL, the Structured Query Language

that is used to access relational databases, Col. 1, lines 19-60). **Owens** describes systems and methods for a system architecture that includes relational database information may be implemented in an object-oriented paradigm (see at least Col. 5, line 35-Col. 6, line 10).

It would have been obvious to one of ordinary skill in the art of electronic-commerce to combine **Schein** and **Owens** to apply an object-oriented paradigm and describe plurality of financial products in terms of plurality of classes and plurality of objects. One of ordinary skill in the art of electronic-commerce would have been *motivated* to combine **Schein** and **Owens** to apply an object-oriented paradigm and describe plurality of financial products in terms of plurality of classes and plurality of objects for the *obvious reason* that the use of object oriented paradigm to describe data and interactions among data provides a more modern technique of how data interacts with business applications. Applying object-oriented terms permits one of ordinary skill in the art to reuse program code (classes) by instantiating a class into one or more objects that correspond to data items retrieved and used by different sub-systems.

The information on the centralized database is available to each of the client system databases for each transaction, and the transaction request is linked to a customer's products. In an object-oriented world, a customer may create (open/add/insert or other term) one or more financial product, including stored value products, and each product may be associated with an object. This plurality of *objects* may also be referred to as a first, second, through nth product, just as the plurality of client systems may be referred to as a first client system, a second client system, etc.).

While both *Schein* and *Owens* disclose the use of databases and key fields to partition and organize databases, *Schein* and *Owens* **do not** specifically refer to "key object classes" and "secondary object classes." However, it was well known, at the time the invention was made, to partition databases and include key (index) fields to organize data. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include keys/indexes, key object classes and secondary object classes. One of ordinary skill in the art at the time the invention was made would have been *motivated* to include keys/indexes, key object classes and secondary object classes for the obvious reason that having references to data (such as keys, indexes, key object classes and secondary object classes) permits faster access of data and cuts down on wait time for customers. By cutting down search and access time, service providers may well retain customers, since customers usually do not enjoy waiting. When customers are forced to wait, customers may decide not to continue patronizing financial service providers, and may take their business elsewhere. One might also provide for the use of Key object classes, for example, when a search has all the key fields, possibly down several levels in a hierarchy. This type of OO design also permits rapid access to data and may assist in retaining customers.

Response to Amendment

In their amendment of 15 December 2003, Applicant amended claims 20 and 29 and cancelled claim 28.

Claims 20-23, 25-27 and 29-35 remain and are examined.

Response to Arguments -- 35 USC § 112 Rejection

Applicant's arguments concerning the rejection under 35 U.S.C.112 have been fully considered but they are not persuasive.

Applicant argues that the terms *key object classes* and *secondary object classes* are clearly described in the specification.

The Examiner respectfully submits that Applicant's comments are not responsive to the rejection of "key object class" as indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As correctly noted by Applicant, the Examiner argued that key object classes "...are not clearly **[re-] defined** in the specification...applicants appear to use the terms synonymously..."

key object classes

For a description of "key object classes," see, for example, page 18, line 13 ("(database 142 preferably contains a "key" field that partitions the database according to a high-level class of objects") followed by the "business unit" class example (page 18, line 16), which is used to organize the data into useful business-related partitions. As the specification notes, the key fields, which partition objects classes, can be used to "organize database 142 in radically different fashions" (page 18, line 18). Some additional examples of key object classes (and the resulting logical partitions) include geographic region (page 18, line 20) and product classes (page 18, line 21). Page 19, lines 1-7, describes key object class inheritance. Page 19, lines 8-18 describes how firewalls can be used for logical separation of objects on a single database. Figure 7 further illustrates the use of these "key object classes."

The Examiner respectfully notes that the term "key object class" appears twice in the original specifications and is not defined:

Database 142 preferably contains a "key" field that partitions the database according to a high-level class of objects. An example of a "key" field is the 15 "business unit" class **188** shown in Figure 7. In the exemplary embodiment shown in Figure 7, the "business unit" class **188** organizes the database into partitions corresponding to, for example, a company organizational structure. Alternate embodiments of the invention organize database 142 in radically different fashions by using differing key fields. For example, the key could be 20 used to logically separate database 142 according to geographic region (e.g. "North America", "Europe" and "Asia"), or according to product classes (e.g. "Smartcard", "ATM card", "Internet account" and the like), or according to

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any other suitable differentiator. **Key object class 188** substantially defines many of the default values for various dependent classes because objects depending from **key object class** generally inherit substantially all of the attributes and functions defined for the parent class. In an embodiment that uses "business unit" as a key class **188**, for example, all database objects that reside in the same business unit generally share common default currencies, languages, product details, address masks and the like. (originally filed application, page 18, lines 13-page 19, line 7).

Applicant introduced the term *key object class* into claims 20, 28, 29 with his Request for Continuing Examination of 28 May 2003. Reference **188** identifies (a) key object class, (b) key class, (c) key field, e.g., "business unit class **188**" key field, further confusing the issue.

Concerning secondary object classes, applicant comments include

secondary object classes

For a description of "secondary object classes," see page 19, line 19, where the specification explains that "secondary classes **186** generally depend from the key class **188**." This is clearly illustrated in Figure 7. Page 20, lines 3-6 gives an example where "secondary object class **186** differentiates various product belonging to the same key class **188**." Page 20, lines 7-20 set forth a further example useful in a smartcard context. Page 21, lines 2-4, contrasts key classes and secondary class. Page 21, lines 6-9 describes how key objects and secondary objects effectively share and re-use objects stored in the repository. Page 21, lines 12-15 also clearly notes the difference between key objects and secondary objects.

The Examiner respectfully notes that the term "secondary object class" appears once in the original specifications while "secondary class" appears 4 times. Neither term is defined. Reference **186** refers to different items, further confusing the issue: (a) secondary class, (b) secondary object class, (c) "products" class, (d) secondary "product" class, (e) product object, (f) secondary objects, (g) stored value products **186**.

The Examiner respectfully notes that Applicant also contradicts himself. On one hand, the Applicant argues

... The Examiner addresses this terminology on page 18 of the Office Action. Certainly, the term "object" is used in the present *application* in its **traditional sense** of an instantiation of an "object class."

Then, Applicant states:

...But the terms "key object class" and "secondary object class" (and their respective objects) are used **differently** in the present *application*. Specifically...[repeats claim language]

The Examiner also respectfully notes that Applicant's arguments are directed to his use of key object class and secondary object class in the *application* in the context of object oriented design. The rejections under 35 USC § 112 are directed at the language of the **claims**, where Applicant attempts to use the terms as synonyms for database keys and indices.

In response to applicant's argument that

This element, which improves efficiency and object re-use in the design and creation of stored value products, is not suggested, inferred, or otherwise disclosed by any combination of the art of record.

the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Applicant's arguments and Applicant's fleeting mention of "object oriented" in the same sentence as the word "database" do not overcome the rejection of claims 20, 29 and their dependent claims as indefinite.

Response to Arguments -- 35 USC § 103 Rejection

Applicant's arguments concerning the rejection under 35 U.S.C.103 have been fully considered but they are not persuasive.

Applicant argues

...applicants restate their argument that neither of the cited references include a system which includes objects that are [...limitations of amended claims...] and wherein are [...limitations of amended claims...] as recited in the claims as amended.

In response to this argument, please see rejection above. The Examiner also respectfully notes that applicants' arguments were raised and answered in previous Office Actions. Nevertheless, the Examiner will take this opportunity to further elaborate on the rejection and to further clarify the record, and so that applicants may more easily identify particular features of their invention that are unpatentable over *Schein*, *Owens* and knowledge generally available to those of ordinary skill in the art.

Applicant argues

[...*Owens*...] does not disclose the specific use of a secondary object that inherits its characteristics from a *key object class* and which is itself a stored value product. It is the combination of this object architecture, in combination with the use of multiple stored value products, that is central to the invention.

In response to this argument, the Examiner notes that the term *inherit* does not appear in the rejected claims. Further, in response to applicants' arguments against *Owens* individually, the Examiner again respectfully notes that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

No combination of *Schein*, *Owens*, or the general prior art attributable to someone of ordinary skill would include the system as recited in the amended claims.

Again, *Schein* discloses applicants' invention but *does not* address issues of object-oriented analysis and design. *Owens* was first introduced in a parent application [09/105406, now abandoned]. *Owens* was re-introduced in the present application to address applicants' concern over the absence of the word *object* in *Schein*.

Owens is used to show that object-oriented paradigms and their application to database technologies are (a) old and well *known*, (b) may be used in many types of computer applications and software design, and (c) may be used particularly with financial products such as claimed by applicants. For purposes of definitions, object technology is the use of objects as building blocks for applications.³ An object is a self-contained module of data and its associated processing.⁴ Applicants have not shown that their use of object-related terminology (e.g., *object*, *object-oriented analysis*, *object-oriented design*, etc.) differs from the terms' widely accepted use.

Owens combines client-server nomenclature, object-oriented terminology in a financial environment that includes various types of financial products from one or more clients and one or more client systems (see at least Col. 5, line 36-Col. 6, line 10). As noted above, Applicants have not argued or shown that their use of the terms "smart card" "bank" "stored value product" varies from the common ordinary meaning of the terms, and as found in *Schein* and *Owens*.

In response to applicant's argument that the references fail to show certain features of applicant's invention, the Examiner respectfully notes that the features upon which applicant relies (i.e., complication and complexity of a database, intricate backend transaction processing system, "...element, which improves efficiency and object re-use in the design and creation of stored value products..."") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from

³ The Computer Desktop Encyclopedia, Alan Freedman, copyright 1996.

⁴ The Computer Desktop Encyclopedia, Alan Freedman, copyright 1996.

the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

A "traverse" is a denial of an opposing party's allegations of fact.⁵ The Examiner respectfully submits that applicants' arguments and comments do not appear to traverse what Examiner regards as knowledge that would have been generally available to one of ordinary skill in the art at the time the invention was made. Even if one were to interpret applicants' arguments and comments as constituting a traverse, applicants' arguments and comments do not appear to constitute an adequate traverse because applicant has not specifically pointed out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. 27 CFR 1.104(d)(2), MPEP 707.07(a). An adequate traverse must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying Examiner's notice of what is well known to one of ordinary skill in the art. *In re Boon*, 439 F.2d 724, 728, 169 USPQ 231, 234 (CCPA1971).

If applicant does not seasonably traverse the well known statement during examination, then the object of the well known statement is taken to be admitted prior art. *In re Chevenard*, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). MPEP 2144.03 Reliance on Common Knowledge in the Art or "Well Known" Prior Art. In view of

⁵ Definition of Traverse, Black's Law Dictionary, "In common law pleading, a traverse signifies a denial."

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applicant's failure to adequately traverse official notice, at least the following are admitted prior art:

...use of objects and classes to describe data allows a clearer view of how data interacts with business applications. Applying object-oriented terms permits one of *ordinary* skill in the art to reuse program code (classes) by instantiating a class into one or more objects that correspond to data items retrieved and used by different sub-systems.

The information on the centralized database is available to each of the client system databases for each transaction, and the transaction request is linked to a customer's products. In an object-oriented world, a customer may create (open/add/insert or other term) one or more financial product, including stored value products, and each product may be associated with an object. This plurality of *objects* may also be referred to as a first, second, through nth product, just as the plurality of client systems may be referred to as a first client system, a second client system, etc.).

...it was well known, at the time the invention was made, to partition databases and include key (index) fields to organize data.

...having references to data (such as keys, indexes, key object classes and secondary object classes) permits faster access of data and cuts down on wait time for customers. By cutting down search and access time, service providers may well retain customers, since customers usually do not enjoy waiting. When customers are forced to wait, customers may decide not to continue patronizing financial service providers, and may take their business elsewhere. One might also provide for the use of Key object classes, for example, when a search has all the key fields, possibly down several levels in a hierarchy. This type of OO design also permits rapid access to data and may assist in retaining customers.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

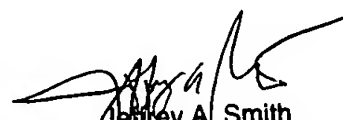
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H Zurita whose telephone number is 703-605-4966. The examiner can normally be reached on 8a-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Smith can be reached on 703-308-3588. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Zurita
Patent Examiner
Art Unit 3625
12 April 2004


Jeffrey A. Smith
Primary Examiner